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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,829	07/31/2001	Nobuo Nukaga	NIT-287	1721

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MATTINGLY, STANGER & MALUR, P.C.
SUITE 370
1800 DIAGONAL ROAD
ALEXANDRIA, VA 22314

EXAMINER

CHAWAN, VIJAY B

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,829

Applicant(s)

NUKAGA ET AL.

Examiner

Vijay B. Chawan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeulen et al., (6,810,379) in view of Farrett (5,636,325).

As per claim 1, Vermeulen et al., teach a voice synthesizing method of converting a stereotypical sentence to a voice through voice synthesis, comprising the steps of:

determining a voice-contents identifier identifying voice contents to said stereotypical sentence (Col.1, lines 21-51);

preparing a speech style dictionary including speech style and prosody data, which, corresponds to said voice-contents identifier (Col.5, line 60 – Col.6, line 14);

selecting prosody data of said synthesized voice to be generated from said speech style dictionary by selecting a contents identifier and a speech style for a synthesized voice to be generated (Col.2, lines 1-21); and,

adding said selected prosody data to voice-synthesizer driving data to thereby perform voice synthesis with a specific speech style (Col.2, lines 22-51).

Vermeulen et al., while teaching the method of claim 1, do not specifically teach synthesizing speech with the specific speech style., i.e., dialect as claimed by the applicant. Farrett, however teaches selection of dialect semantics to be output as synthesized speech (Col.3, lines 28-52, 62-67). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the method of synthesizing speech from linguistic units as taught by Farrett in the method of Vermeulen et al., because this would effectively identify specific dialect and synthesize speech according to the rules of that dialect (Farrett, Col.7, lines 14-47).

As per claim 2, Vermeulen et al., teach the voice synthesizing method according to claim 1, wherein said prosody data comprises at least a sequence of phonetic symbols that are voice elements into which said voice contents of said stereotypical sentence are composed, and information on a duration, an intensity, and power of each of the voice elements constituting said sequence of said phonetic symbols (Col.1, lines 21-51, Col.7, lines 33-58).

As per claim 3, Vermeulen et al., teach a voice synthesizer for performing voice synthesis by converting a stereotypical sentence to prosody data and adding said prosody data to a voice synthesizing part as voice synthesizer driving data, comprising:

a voice-contents identifier for identifying a type of voice contents of said stereotypical sentence (Col.1, lines 21-51);

a memory for storing a speech style dictionary in which speech-style information that is selectable for a speech style for synthesized voice and prosody data are associated with each other (Col.7, lines 4-32);

pointing means for pointing to one said voice contents identifier and one said speech style of a voice to be synthesized at a time of voice synthesis (Col.2, lines 1-21); and,

said voice synthesizing part for selecting said prosody data pointed to by said pointing means from said speech style dictionary and converting said prosody data to a voice signal (Col.2, lines 22-51).

Vermeulen et al., while teaching the voice synthesizer of claim 3, do not specifically teach synthesizing speech with the specific speech style., i.e., dialect as claimed by the applicant. Farrett, however teaches selection of dialect semantics to be output as synthesized speech (Col.3, lines 28-52, 62-67). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the speech synthesizer which synthesizes speech from linguistic units as taught by Farrett in the method of Vermeulen et al., because this would effectively identify specific dialect and synthesize speech according to the rules of that dialect (Farrett, Col.7, lines 14-47).

As per claim 4, Vermeulen et al., teach a voice synthesizer according to claim 3, wherein said prosody data comprises at least a sequence of phonetic symbols that are voice elements into which said voice contents of said stereotypical sentence are

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composed, and information on a duration, an intensity and power of each of the voice elements constituting said sequence of phonetic symbols (Col.1, lines 21-51, Col.7, lines 33-58).

As per claim 5, Vermeulen et al., teach a cellular phone having a voice synthesizer as recited in claim 3 (Col.8, lines 29-33).

As per claim 6, Vermeulen et al., teach a prosody data distributing method of performing voice synthesis by converting a stereotypical sentence to prosody data and adding said prosody data to a voice synthesizing part in a terminal device as voice-synthesizer driving data, comprising the steps of:

determining a voice-contents identifier that identifies a type of voice contents of said stereotypical sentence (Col.1, lines 21-51);

preparing a speech style dictionary including a speech style and prosody data which corresponds to said voice-contents identifier (Col.5, line 60 – Col.6, line 14); and,

supplying said speech style dictionary to a server provided in a communication network or a terminal device connected via said server (Col.5, lines 22-54).

Vermeulen et al., while teaching the method of claim 6, do not specifically teach synthesizing speech with the specific speech style., i.e., dialect as claimed by the applicant. Farrett, however teaches selection of dialect semantics to be output as synthesized speech (Col.3, lines 28-52, 62-67). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to use the method of synthesizing speech from linguistic units as taught by Farrett in the method of

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Vermeulen et al., because this would effectively identify specific dialect and synthesize speech according to the rules of that dialect (Farrett, Col.7, lines 14-47).

As per claim 7, Vermeulen et al., teach the prosody data distributing method according to claim 6, wherein said prosody data comprises at least a sequence of phonetic symbols that are voice elements into which said voice contents of said stereotypical sentence are composed, and information on a duration, an intensity and power of each of the voice elements constituting sequence of phonetic symbols (Col.1, lines 21-51, Col.7, lines 33-58).

As per claim 8, Vermeulen et al., teach the prosody-data distributing method according to claim 6, wherein said supplying of said speech style dictionary is supplied to a terminal device further includes selecting a speech style dictionary corresponding to a speech style pointed to by a user's terminal device transferring said selected speech style dictionary to said terminal device from said server, and storing said transferred speech style dictionary into a speech-style dictionary memory in said device, so that voice synthesis is carried out with said speech style pointed to by said terminal device user (Col.5, lines 22-54, Col.1, lines 21-51, Col.2, lines 22-51, Col.5, line 60 – Col.6, line 14, Col.7, lines 33-58).

As per claim 9, Vermeulen et al., teach the prosody-data distributing method according to claim 7, wherein said prosody data is supplied by referring to a management list of contents for synthesis which is open to public (Col.4, lines 31-49).

Response to Arguments

4. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lumelsky 96,081,780 teaches TTS and prosody based authoring system.

Kato et al., (6,823,309) teach speech synthesizing system and method for modifying prosody based on match to database.

Brittan et al., (6,725,199) teach speech synthesis apparatus and selection method.

Kuhn et al., (6,029,132) teach a method for letter-to-sound in a text-to-speech synthesis.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

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number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vijay B. Chawan
Primary Examiner
Art Unit 2654

vbc
1/9/06

VIJAY CHAWAN
PRIMARY EXAMINER